

Teachers' Burnout Levels in terms of Some Variables

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Abstract

The aim of this study is to examine burnout levels of secondary education teachers in terms of some variables. The study was conducted with descriptive survey model and 532 secondary education teachers working in Aydın in 2009-2010 academic year participated in the study. At the end of the study it was found that there was a significant difference between teachers' burnout levels and their demographic features such as subject, age, sex, seniority, and their opinions about relationships with administrators and colleagues, updated secondary education curriculum. On the other hand, it was seen that there was no significant difference between their burnout levels and demographic features like faculty they graduated and type of school they work and their opinions about physical condition of the school they work, academic level of students, their economic levels, university entrance system and their attendance to in service training courses. Findings reached were discussed in connection with literature and suggestions were made.

Key Words

Burnout, Secondary Education, Teacher, Emotional Exhaustion, Depersonalization and Personal Accomplishment

Burnout is defined as a function of stress individuals feel in their social and professional life (Gold & Bachelor, 2001), loss of aim, energy and idealism towards job (Edelwich & Brodsky, 1980), exhaustion and tiredness because of a decrease in physical and emotional energy (Maslach, Schoufeli, & Leiter (2001). Maslach et al. (2001) conceptualized burnout in three dimensional phenomenon, these are exhaustion, depersonalization and accomplishment. As a result of burnout individual's performance at work decreases and it causes damages in his health both physically and psychologically at behavioral level. Consequently

some problems were identified in individual's personal and family life (Black, 2003; Hellesøy, Grønhaug, & Kvitastein, 2000; Maslach et al.).

Physical symptoms of burnout can be listed as following; headache, fatigue, problems in stomach, ulcer, restlessness, increase in heart rhythm, cardiovascular problems and neurological problems (Black, 2003; Talmor, Reiter, & Feigin, 2005), psychological symptoms are rage, indication of depression, steady tension, confusion, indecision, chronic anxiety, long term insufficiency feeling, low self-esteem, hopelessness, substance addiction, problem with focusing, charging others for his own responsibilities, disappointment and anxiety attack (Black; Naylor, 2001; Sarı, 2004; Talmor et al.; Wood, 2002), behavioral indications are deterioration of interaction, having mocking manner towards his colleagues and other individuals, absenteeism or showing illness as an excuse not to come to work, deterioration in the quality of service, postponing or not doing some works (Kaçmaz, 2005).

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Burnout experienced by teachers is a big problem (Van Horn, Schaufeli, Greenglass, & Burke, 1997) effecting teaching-learning processes (Blandford, 2000). Teacher burnout is defined as physical, mental and behavioral tiredness (Guglielmi & Tatrow, 1998; Kyriacou, 1987), it is also defined as a process emerged at the end of appropriate and inappropriate reactions given to the stressful situations which directly affects teacher's physical, academic and social performance (Sears, Urizar, & Evans, 2000). Burnout experienced by teachers has been tried to be explained by personal or situational variables (Özdemir, 2007). Personal factors are demographic features (Baysal, 1995), term of service (Girgin, 1995), way of coping with stress (Chan & Ek, 1995) focus of control (Lunenburg & Cadavid, 1992) and motivational factors (Brissie, Hoover-Dempsey, & Bassler, 1988). Situational factors are; misbehavior observed in students, tension in school atmosphere, and inadequate support and respect for work, lack of material support to perform their profession (Özdemir, 2007), social support (Cheuk & Sai, 1995), lack of administration's support (Brissie et al.) and workload (Sarros & Sarros, 1987). As a result of burnout it is observed in teachers that absentee, lack of desire toward teaching learning process and decrease in expectations about students (Belacastro, 1982; Farber, 1991), lack of interest, compassion and idealism for students, administration, parents and generally for the job, and developing negative feelings against the people he gives services (Schwab, Jackson, & Schuler, 1986).

Studies conducted with teachers about their burnout level include variables such as age, sex, seniority, type of school graduated from, their subject, type of school they work, self-efficacy, socioeconomic level, satisfaction with work atmosphere depression (Avşaroğlu, Deniz, & Kahraman, 2005; Baysal, 1995; Berg, 1994; Burke, Greenglass, & Schwarzer, 1996; Dolunay, 2002; Haycock, 1998, 2000; Hoy & Miskel, 1991; Izgar, 2001; Johnson & Birkeland, 2003; Kayabaşı, 2008; Kırılmaz, Çelen, & Sarp, 2003; Labone, 1995; Leithwood, Jantzi, & Steinbach, 2001; Maslach et al., 2001; Norton, 1999; Perlman & Hartman, 1982; Polat et al., 2009; Sarı, 2004; Schaufeli & Buunk, 2003; Tümkaya, 1999, 2001). In addition to them there are studies which examined the relationship between teachers' burnout level and their relationship with colleagues and administrators (Cemaloğlu & Erdemoğlu Şahin, 2007; Girgin & Baysal, 2005).

When the literature is reviewed, in Turkey there is no study which examined teachers' burnout level

and their opinions about new curriculum and examination system. In order to implement the program efficiently, it is required that the program should be understood well, physical conditions should be rearranged according to the new program, there should be enough materials (İşman, Baytekin, Balkan, Horzum, & Kırıyıcı, 2002) and students should have prior knowledge (Bodner, 1990; Özmen, 2005). In this case it is thought that teachers working in different types of schools might have different burnout levels. Another important factor is the constantly changing examination system; it not only increases the expectation from teachers but also causes changes in teachers study systems (Türk Eğitim Derneği, [TED], 2008). Expectation from the teachers and inconsistency with working conditions with these expectations may cause burnout. Teachers think that physical conditions of their school, class load, crowded classes, interaction with school administration, difficulties in reaching vocational recourses, lack of materials, low school and parents cooperation, lack of communication with other teachers, not being appreciated and university entrance system impede their professional development (Milli Eğitim Bakanlığı, 2010). In conducted studies teachers stated that they had some worries about how the new system would be included in university entrance exam, there was inconsistency with the program and the exam system, they didn't have enough materials (Feyzioğlu, 2011; Kurt & Yıldırım, 2010; Özden, 2007) and students wanted to have an exam centered program (Özden). Therefore it is seen that teachers carried out lessons according to exam, not according to the program and used resources prepared for the exam (Feyzioğlu; Kurt & Yıldırım). It is expected that there might be a difference in teachers' burnout levels in terms of high schools which enroll successful students and unsuccessful students.

Purpose of the Study

In this context, the aim of this study is to examine burnout levels of secondary education teachers with different subjects with regards to demographic features (subject, age, sex, seniority, faculty they graduated, type of school they work), their opinions about updated secondary education curriculum, university entrance system, relationships with administrators and colleagues, academic level of students, physical condition of the school, their attendance to in service training courses.

In this context the aim of this study is to examine burnout levels of teachers who teach different sub-

jects at secondary education with regards to their demographic features (subject, sex, age, seniority, faculty they graduated from and type of school they work) and their opinions about updated secondary education curriculum, university entrance system, teachers' relationship with their colleagues and administrators, students' academic level, physical conditions of the school they work, economical conditions, and attitude toward in service training courses.

Method

The study is conducted with descriptive survey model. In this model the aim is to define the present situation, compare present situation with defined standards or state relationship between certain cases (Cohen, Manion, & Morrison, 2009). In this study with the use of this model teachers' burnout level has been described.

Participants

The data for the present study were collected from 532 secondary education teachers working in Aydin in 2009-2010 academic year. The sample is identified randomly. Among 532 participants 238 (44.7 %) were female, 288 (54.1 %) were male and 6 of them (2.2%) of them did not inform on their sex 44,92 % of them were between 20-40 years old, 51,3 % of them were 40 and over and 3,76 % of them did not inform on their age.

Measures

Maslach Burnout Inventory (MBI) and *Personal Information Form* developed by the researchers are used as data collection devices.

Maslach Burnout Inventory (MBI): This inventory was designed by Maslach and Jackson (1981). Inventory approaches burnout through three subscales: emotional exhaustion, depersonalization and personal accomplishment. There are nine items in emotional exhaustion subscale affecting teaching activities tiredness, boredom and decrease in emotional energy. There are five items under depersonalization subscale concerning expressing negative emotions to the students, and eight items under personal accomplishment about accomplishing the aim of helping students to learn. Validity and reliability studies of the instrument were conducted by Ergin (1992). For validity study content validity was calculated and Cronbach's α coefficient was .83 for emotional exhaustion, .65 for depersonalization

and .72 for personal accomplishment. Retest validity coefficients for subscales of the test are .83, .72, .62 respectively. Structure validity of the scale is done examining factor structure. At the end of Varimax Rotation three main factors were identified. Variance for the first factor was 20.62 % and loadings were between 0.51 and 0.77. Variance for the second factor was 14.63 % and its loadings were between 0.51 and 0.68. Variance for the third factor was 9.94 % and its loadings were between 0.49 and 0.67. Each subscale of the instrument was scored as low, normal and high. For emotional exhaustion 27 and over was high, 17-26 was normal and 0-16 was low. For depersonalization 13 and over was high, 7-12 was normal and 0-6 was low. Similarly, for personal accomplishment 0-31 was high, 32-38 was normal and 39 and over was low.

Validity study for factor structure of the instrument was conducted with the data gathered from the sample group of the study-532 teachers. Lisrel 8.3 (Jöreskog & Sörbom, 1993) was used for confirmatory factor analysis and (DFA) was utilized to check whether the original factor structure was valid in Turkey. Consistency indices at the end of DFA are given in Table 1.

Table 1
Consistency Indexes Values about the Original Model ($n = 532$)

Model	χ^2	df	χ^2/df	GFI	AGFI	RMSEA	CFI	IFI	NFI	NNFI
	516	185	2.8	0.92	0.89	0.05	0.89	0.89	0.84	0.87

The ratio of χ^2 value to the degree of freedom is an important ratio. If the ratio is three or less that means there is a good conformity (Loehlin, 2004). When the data collection device's conformity indices are examined it is seen that conformity indices have perfect conformity. While RMSEA value is 0.05, CFI value is 0.89. Moreover, χ^2/sd ratio is 2.8. This is another evidence for having good conformity. Chi-square value is below three. As the value is responsive to the amount of sample it is recommended that it should be interpreted with other conformity indices (Jöreskog & Sörbom, 1999). In addition RMSEA value is below .06 and GFI value is above .90 which is a sign of good conformity (Şimşek, 2007). When the values in Table 1 are examined it is seen that conformity values are enough and it justifies the three dimensional structure mentioned above.

Personal Information Form

In personal information form there are questions about sex, age, faculty they graduated, type of

school they work, subject and seniority, there are semi-structured questions about their opinions about updated secondary education curriculum, university entrance system, teachers' relationships with their colleagues and administrators, students' academic level, schools physical condition, economic condition, attending in-term-training courses. Teachers' answers to the semi-structured were examined and two field and two assessment experts' opinions were asked and categories were formed. Quantitative data was gathered by assigning one point for each mentioned category. Transformation of qualitative data to quantitative data provides comparison between themes and categories. The correlation between teachers' burnout level and these quantitative data was examined.

Data Analyses

The data gathered from burnout scale was analyzed using one way multivariate analysis of variance (one-way MANOVA), and one-way analysis of variance (univariate ANOVA) as a following test for each dependent variable. If ANOVA test results are significant then Bonferonni test is used. If variances are equal then Dunnett's T3 test is utilized. Independent variables of the study are teachers' demographic features and opinions about different fields. Before testing each independent variable's effect on dependent variables MANOVA's assumptions were tested. For each dependent variable homogeneity is identified by using Levene Test, homogeneity for variance-covariance matrixes is tested with Box's M Test. If the results of Box's M Tests are not homogeneous then Pillai's Trace test is utilized. The size of effect in the study is measured using Partial eta-squared (η_p^2). Partial eta-square values were considered low if they are $\eta_p^2 \leq 0.01$, average if they are $\eta_p^2 = 0.06$, high if they are $\eta_p^2 = 0.14$ by Kittler, Menard and Phillips (2007).

Results

Results of Multivariate Analysis of Variance (MANOVA) on variables in the study and teachers' burnout level have indicated that their burnout level differ significantly in terms of their sex ($\lambda_{\text{Wilks}} = .981$, $F(3, 522)=3.32$, $p<0.05$), seniority ($\lambda_{\text{Wilks}} = 0.923$, $F(3, 514)=3.47$, $p<0.001$), subject ($\lambda_{\text{Pillai}} = 0.099$, $F(27, 1566)= 1.98$, $p<0.05$), age ($\lambda_{\text{Pillai}} = 0.022$, $F(3, 528)=4.03$, $p<0.01$) and according to their opinions about their relationship with administrators ($\lambda_{\text{Pillai}} = 0.064$, $F(3, 290)= 6.59$, $p<0.01$), the appropriateness of the new curriculum ($\lambda_{\text{Wilks}} = 0.953$, $F(6,$

$658)=2.11$, $p<0.05$), their relationship with their colleagues ($\lambda_{\text{Wilks}} = 0.930$, $F(9, 659)=2.22$, $p<0.05$). However, there is no significant difference between teachers' burnout levels and following variables; faculty they graduated from ($\lambda_{\text{Wilks}} = 0.983$, $F(6, 1004)=1.45$, $p>0.05$), type of school they work ($\lambda_{\text{Pillai}} = 0.005$, $F(3, 521)=0.81$, $p>0.05$), physical condition of the school they work ($\lambda_{\text{Wilks}} = 0.981$, $F(3, 380)=2.44$, $p>0.05$), their opinions about ;students' academic level ($\lambda_{\text{Wilks}} = 0.978$, $F(6, 720)=1.37$, $p>0.05$), their economic conditions ($\lambda_{\text{Wilks}} = 0.980$, $F(3, 356)=2.40$, $p>0.05$), university entrance system ($\lambda_{\text{Wilks}} = 0.979$, $F(9, 815)=0.78$, $p>0.05$) and in service training courses ($\lambda_{\text{Wilks}} = 0.951$, $F(12, 1100)=1.75$, $p>0.05$).

At the end of MANOVA analysis, when the level of independent variables' exemplification level of dependent variables is considered; emotional exhaustion, depersonalization and personal accomplishment it is seen that sex explains .2 % ($\lambda^2=0.019$), seniority .3% ($\lambda^2=.026$), their opinions about administration .3 % ($\lambda^2=0.064$), their opinions about curriculum .2% ($\lambda^2=0.024$) and relationship among them .2% ($\lambda^2=0.024$) of the dependent variables.

Discussion and Suggestion

The purpose of the present study was to examine the teachers' burnout level in terms of some variables. Findings indicated that there is no significant difference with regards to sex in emotional exhaustion and depersonalization subscales while there is significant difference in personal accomplishment subscale. Burnout levels of male teachers were higher than females under personal accomplishment subscale. This finding is parallel with the ones in literature (Labone, 1995; Sarı, 2004; Schaufeli & Buunk, 2003; Tümkaya, 2001). However, there are studies that do not support that finding (Avşaroğlu et al., 2005; Dericioğlu, Konak, Aslan, & Öztürk, 2007; Kayabaşı, 2008; Maslach et al., 2001). When the finding is considered it can be said that the female's personal accomplishment is higher than the male's as females need to more successful than the males they compete with in the work place.

At the end of the analysis it is seen that there is a significant difference in terms of age in all subscales. While 20-40 year old teachers' average scores are higher in emotional exhaustion and depersonalization than teachers who are 41 and over, teachers who are 41 and over has lower average scores in personal accomplishment than 20-40 year old teachers. That means, teachers who are 41 and over find

themselves less successful than others. In abroad there are studies showing the correlation between emotional exhaustion and age and younger staffs have higher emotional exhaustion than over 30-40 year old staff, which support this study's finding (Maslach et al., 2001; Perlman & Hartman, 1982). Furthermore, while there is no significant difference between teachers' age and personal accomplishment scores, there is significant difference between their average scores from emotional exhaustion and depersonalization (Avşaroğlu et al., 2005). When developmental periods are taken into account, between 30 and 40 year old is productivity period (Woolfolk, 1998, p. 73). It is thought that not being able to achieve what they want in their profession may cause them to exhaust.

When the correlation between seniority and burnout levels is examined it is seen that there is a significant difference in emotional exhaustion and personal accomplishment. In average emotional exhaustion scores, there is significant difference between teachers with 11-15 year seniority and 21 year and over, in average personal accomplishment scores between teachers with 5-10 year seniority and 21 year and over, similarly between teachers with 11-15 year seniority and 21 year and over. It is found that there is a correlation between seniority and burnout (Tümekaya, 1999), there is positive and significant correlation with seniority and emotional exhaustion (Özdemir, 2007), teachers who have just started working and teachers who have been working for a long time (more than 24 years) have lower burnout levels than other teachers (Leithwood et al., 2001). The reason for having higher emotional exhaustion in young teachers might be that they don't have enough experience about how to cope with problematic situations. Nevertheless, in personal accomplishment subscale why senior teachers feel less successful can be explained with Erikson's psychosocial development theory. In this theory 40's is a period of stagnation against productivity (Woolfolk, 1998, p. 73) people who worked for 21 years and over and close to retirement may perceive themselves unsuccessful if they couldn't show the performance they have wanted. Furthermore not being able to keep up with new developments might cause to have same kind of perception too.

When the correlation between the subjects and burnout level is examined there is a significant difference in all subscales. On the other hand, when the literature is reviewed it is seen that there is not a correlation between subjects and burnout level (Maraşlı, 2005). However, while there is not a mea-

ningful difference between subjects and emotional exhaustion, there is meaningful difference in other subscales (Izgar, 2001). According to the findings in this study there is a significant difference between subjects and burnout level whereas it cannot be observed between the subjects so it is necessary to carry out deep investigations about the directions of the burnout. With updated curriculum the role of the teacher has changed in the classroom. Teacher's role shifted from just lecturing to guidance to lead students to the knowledge to achieve this preparing/arranging the atmosphere (Yurdakul, 2004). With updated curriculum there teachers may give different reactions to this new role. For example, especially in science lessons (chemistry, physics, and biology) teachers are expected to use the laboratories more effectively. On the other hand, studies examined how efficiently the laboratories are used shows that they aren't used efficiently enough (Feyzioğlu, Demirdağ, Ateş, Çobanoğlu, & Altun, 2011).

Whether teachers experience a problem in their relationship with administrators and their emotional exhaustion, there is a significant difference. It is understood that teachers who stated a problem with administration have higher emotional exhaustion than teachers who stated no problem. In a study supporting the finding, teachers who weren't appreciated by administration experienced emotional burnout and depersonalization, as a result it affected their personal accomplishment (Cemaloğlu & Erdemoğlu Şahin, 2007) and a negative correlation between emotional exhaustion and administrator support (Ito & Brotheridge, 2003). According to the literature reviewed and research finding teachers who experienced problems with administration have higher emotional exhaustion than teachers who didn't experience any problem.

There is a remarkable difference between teachers' relationships with their colleagues and their burnout level. It is observed that teachers who state that there is a problem with colleagues have higher emotional exhaustion and depersonalization than the ones who state no problem. In a study getting support from colleagues and subscales of burnout were considered together and teachers who got support from colleagues had significantly lower average scores in emotional exhaustion and depersonalization than teachers who got no support from colleagues (Girgin & Baysal, 2005).

When it comes to correlation between the opinions of teachers about secondary education program and their burnout level it is seen that teachers who think that the program is inappropriate have higher

burnout level than teachers who think it is appropriate or appropriate but has some deficiency. That means teachers may experience indication of fraying, loss of energy, weariness or tiredness, who are administering updated secondary education program. In response to open ended questions teachers stated that they weren't sufficiently informed about the administration of the program, educational environment wasn't rearranged adequately. There is a close correlation between updated curriculum's content, vision, aims, course objectives, assessment method and features like physical conditions of the school, profile of the students to implement new curriculum successfully. These conditions with updated new curriculum might be effective on teachers' burnout level.

There are studies in literature show that physical conditions, student profile and exam system effect materials, methods and techniques teachers use (Ayoubi & Boujaoude, 2006; Hasanoğlu, Ceyhun, & Karagölge, 2002; Kara & Özden, 2005; Morgil, Yücel, & Ersan, 2000; Özden & Tekin, 2006; Üce, Özkaya, & Şahin, 2000). Teachers are asked to revise update their methods, techniques, strategies and models they use so far in the lessons with the new updated curriculum. Nevertheless, besides lack of physical conditions, inconsistency between program objectives and examination criteria of OSYM effects the change in teacher role in the classroom. Being stuck between demands of the new updated curriculum and exam system teachers' burnout level may change.

In this study there is no significant difference between burnout and its subscales and faculty they graduated, type of school they work, physical condition of the school they work, how much they attend in service training courses and their opinions about university entrance exam. Nevertheless, there are a lot of studies not supporting this finding, which indicate a correlation between teachers' satisfaction at work and their burnout level (Baysal, 1995; Dolunay, 2002; Haycock, 1998, 2000; Hoy & Miskel, 1991; Johnson & Birkeland, 2003; Kırılmaz et al., 2003; Norton, 1999; Polat et al., 2009; Tümka-ya, 1999). It is thought that different studies should be conducted in this area.

Consequently, teachers' burnout levels differ not only in terms of their demographic features such as sex, age, seniority and subject, but also according to their relationship with administrators and colleagues, their opinions about appropriateness of updated secondary education curriculum. On the other hand, findings reveals that there is no significant

difference between teachers' burnout levels and the faculty they graduated from, type of school they work, physical condition of the school they work, students' academic level, their economic level, their opinions about university entrance exam, and in service training courses.

The results suggest that the reasons of burnout in young teachers should be examined. Moreover, additional studies should be conducted with subjects and subjects with intense burnout should be identified and necessary precautions should be taken. It is found that another variable correlated with teachers burnout is their relationship with administrators and colleagues. In accordance with this finding it can be suggested that the sources of the problem should be examined and solutions should be put into practice and seminars about communication and problem solving skills should be held. Moreover, in this study it is determined that teachers who think updated secondary educational program is not appropriate experience higher levels of burnout. Especially according to teachers responses to the open ended questions they stated that they don't have enough information about how to implement the new program and enough equipment, which is very important. This should be examined in detail and necessary precautions to meet teachers' needs should be taken.

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